

PRODUCT INFORMATION LEWATIT® UltraPure 1296 MD



Lewatit® Ultrapure 1296 MD is a “ready to use” mixed bed for final polishing in Ultrapure Water applications.

The high grade gel type components are intensively purified to achieve highest purity water conditions.

Due to a special conversion process of the SBA component, **Lewatit® Ultrapure 1296 MD** has a very high capacity for boron and silica.

Avoiding excessive mechanical stress during mixing to an equivalent ratio leads to an extremely low particle release.

The performance of each produced batch number of **Lewatit® Ultrapure 1296 MD** is controlled.

The gel type components show a larger difference in average bead size, thus the ready to use mixed bed is less separable.

To allow a separation of these mixed beds a higher freeboard is necessary compared to **Lewatit® 1294 MD**.

By reason of the monodisperse production the resin mixture has a very high physical and chemical stability.^{UP}

The smaller diameter of the SAC resin produced especially for semiconductor applications allows an extremely high kinetic exchange rate.

You will receive **Lewatit® Ultrapure 1296 MD** in special packaging which avoids any external contamination.

This document contains important information and must be read in its entirety.

PRODUCT INFORMATION

LEWATIT® UltraPure 1296 MD



Common Description

Delivery form	H+/OH-
Functional group	quaternary ammonium, type 1 /sulfonic acid
Matrix	styrenic
Structure	gel
Appearance	dark brown / light brown translucent

Specified Data

Uniformity coefficient (SAC component)		max.	1.1
Uniformity coefficient (SBA component)		max.	1.1
Mean bead size (SAC component)	d5	mm	0.55 (+-0.05)
Mean bead size (SBA component)	0	mm	0.67 (+-0.06)
Total capacity (SAC component H+ form)	d5	min. eq/L	2.
Total capacity (SBA component OH- form)	0	min. eq/L	1

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Typical Physical and Chemical Properties

Ultrapure water rinse test (resistivity)	after 80 BV delta TOC	min. MOhm*cm	18
Ultrapure water rinse test	after 80 BV	max. ppb	1.0
Bulk density for shipment	(+/- 5%)	g/L	710
Water retention (SAC component H+ form)		approx. weight %	46 -52
Water retention (SBA component OH- form)		approx. weight %	56 -66
Stability pH range			0 - 14
Storage time (after delivery)	Storage	max. years	1
temperature range		°C	-20 - +40

Operation

Operating temperature		max. °C	40
Operating pH range	during exhaustion		0 - 14
Bed depth for single column		min. mm	600
Specific pressure loss kPa*h/m2 (15°C)		kPa*h/m2 (15°C)	1.2
Max. pressure loss during operation		kPa	20
Specific flow rate		max. BV/h	0

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Additional Information & Regulations

Safety precautions Strong oxidants, e.g. nitric acid, can cause violent reactions if they come into contact with ion exchange resins. **Toxicity** The safety data sheet must be observed. It contains additional data on product description, transport, storage, handling, safety and ecology. **Disposal** In the European Community Ion exchange resins have to be disposed, according to the European waste nomenclature which can be accessed on the internet-site of the European Union. **Storage** It is recommended to store ion exchange resins at temperatures above the freezing point of water under roof in dry conditions without exposure to direct sunlight. If resin should become frozen, it should not be mechanically handled and left to thaw out gradually at ambient temperature. It must be completely thawed before handling or use. No attempt should be made to accelerate the thawing process. **Packaging** The experience has shown that the packaging stability for reliable resin containment is limited to 24 months under the storage conditions described above. It is therefore recommended to use the product within this time frame; otherwise the packaging condition should be checked regularly.

This information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

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